EDITORIAL

Welcome to issue 14 of the 3d Construction Kit User Group Newsletter.

The last editorial sounded so depressing with all that talk about floods etc., that you might have got the impression that I myself was depressed. Not so, now that everything is back to normal, apart from one doorframe on which the paint just refuses to dry for some strange and unknown reason. It is covered in dog hairs (down at dog level), and crumbs and fluff higher up. Any painters out there who can come up with any tips please get in touch. It has been washed down with turps etc three times and the paint still changes colour and refuses to dry even after six weeks wait. Like the ancient mariner, during the flood I hung out of an upstairs window and moaned, "Water, water everywhere and not a drop to drink!" Actually we had quite a few "funny" moments during that time. The Gas Board had just completed some digging before the flood and the water washed away the sub-soil leaving a thin crust on top. One of our friendly policemen was wading through four feet of water when he "discovered" a ten foot deep hole! His helmet floated - which was a good thing as he might have drowned if someone hadn't seen it! A neighbour was rescuing his children by carrying them on his shoulders one by one to dry land when, upon his return journey he spotted his black Labrador dog, together with its kennel, floating down the road. It was a strange and interesting experience watching the in-shore rescue boat sailing past the front garden too. We boasted for a while that we had an indoor pool - which incidentally intrigued our dog. He kept running downstairs and going for a splash-about and then running up to jump on my bed to shake himself during the night. I also never realised that house-training your dog so well could be such a bind! Every time he needed to go "walkies" he had to be carried, (if we wanted a dry dog), on our shoulders until we reached dry land, (only for him to do his best to wet that land too). Incidentally, the tropical fish went "walkies" too. The only creatures in our house that didn't get wet were the hamster and the budgie! Worst thing of all was the fact that everytime I had to go to the shops I had to wade there and all of Llandudno now knows what colour knickers I wear!

Right! No more talk about water or floods and on to things 3D - version V2.09 of Kit 2 is being playtested as you read this and should be ready shortly. I'll let everyone know when it is available. Any delay is due to the problems I had in getting it through to the playtesters so don't blame Incentive - the fault was all mine as they did send it to me in July! As the next issue of the newsletter is due out towards the middle to end of October you won't have to wait too long for a report and details of how you can exchange your disks for the latest version. Sadly there were a few of programs that people had sent me to take a look at before the disaster and they have been lost. I don't have a record of who they were from as they were in the envelopes with the letters so if you have sent me a disc for evaluation and you don't hear from me about it before the next newsletter then please get in touch so we can sort it out. Likewise, I have now replied to all the letters I have found so, if you haven't heard from me regarding anything you asked about, please get in touch. Most of the contributions I had on file have been used for this and the last newsletter so I am a bit short for the next one - hope you can help me out. Apart from all this we are back to normal and it is all systems go! I hope you enjoy this issue. See you all again in October!

Mandy

LETTERS

Dear Mandy

Thank you very much for writing to Domark for me. I am sending you a photograph of my CPC set up so you can see what a great Amstrad fan I am. I use an old PC box with my good old Amstrad inside it. Could you please tell me which other programs Incentive have programmed for the CPC? I have DRILLER, DARK SIDE, VIRTUAL WORLDS and 3D KIT. Do you know of other programs like these in 3D with or without the Freescape system? I hope these aren't too many questions but I don't know anybody in Germany who can give me answers. By the way, is Kit 2 only available for 16 bit computers? Who could give me any hints for Driller or Dark Side, for example, where must I drill in the 18th Sector (Driller). In the manual for Driller there is an order form for a "Full Colour Driller Poster" with the address of "Driller Poster Offer, Incentive Software, 2 Minerva House, Calleva Park, Aldermaston, Berks". Do you know if this is the actual address? Do you know of any addresses where I could order Amstrad software? Don't be angry about my bad English. It is a long time ago that I learned it in school.

Stephan Sander - AMSTRAD CPC

Hackethalstrabe 39, W-3012 Langenhagen, Germany

Firstly, let's get the address right as the one you have for Incentive is wrong. It is Incentive Software, Zephyr One, Calleva Park, Aldermaston, Berks, RG7 4QW. Unfortunately the poster offer is not valid any more though. Over the years Incentive have programmed a huge amount of software for the CPC and it would be impossible to list them all here, however, as far as Freescape programs are concerned they have produced CASTLE MASTER for CPC which I note isn't on your list. Unfortunately Kit 2 is only available for 16 bit machines and, in the case of PC is not available in CGA format. I cannot really help you with hints for Driller as (shock horror) I have never played it myself! You sound very lonely out there in Germany without any friends to contact regarding 3D Kit so I have printed your address in full - come on all you fellow German members, why not get in touch with Stephan and help him out a bit? By the way, I have to say that I am always profoundly impressed with the standard of English that I read in all letters from abroad. When you consider what a mess I would make of trying to write in German your command of the English language makes me ashamed of myself!........................Mandy

Dear Mandy

I have had lots of problems with Kit 1 and my hardware - I think because I ordered the Kit 1 early and maybe I have an old version. I cannot run it with my accelerator cards or from my hard-disk. Maybe there are problems with the flicker-fixer with Kit 1 V1.1. With Kit 2 all seems to be well, but there is no hard disk install program on my program disk as advised in the manual so I copied the files by hand and found that I now cannot use my German keyboard without a lot of "trial and error" to find the right keys for programming. Maybe I need a special German version or a missing Install program? I use a lot of the PD disks as I try to learn from them so I have had to be using both Kit 1 and Kit 2 for some months now so I would really love to have up to date versions of both. My first explorations with Kit 2 have impressed me. This program is great and seems to offer far more than I am able to use in the near future. At the moment I am puzzling out how to have more gadgets working on different borders. It should, I think be possible to use the same gadget space once defined for several different movements with other pictures in one procedure and

different effects. Many thanks for all the help you give us with the User Group and the newsletters.

Rolf Prietz - AMIGA KIT 1 AND 2

By the time you read this I hope that you will already have received V2.07 of Kit 2 and V1.2 of Kit 1 which should make life a lot easier for you. You should find that Kit 1 V1.2 works well with Amiga 2000 whereas the early version did not. Many people have complained that they cannot install Kit 2 on the Amiga HD. This is because the Install command should not be on the program disk. There was a HD Install version programmed originally for the A600 series of computers which came with internal hard disk but this wasn't implemented for other versions and, and I may be wrong here, I think it is no longer there for A600 either. I have to confess that I haven't yet tried putting other animations within other borders apart from the globe in one area so I will have to look into this and report back when I know what I am doing - that is, unless some other clever Kit 2 user would like to write in and let us know how it is done?.................Mandy

Dear Mandy - From a postcard received from Turkey:

> Sitting on a beach in Turkey,
> Looking tanned and feeling perky,
> Mandy Rodrigues? It wouldn't suit her,
> Nowhere to plug in her computer!

Pete Spooner

I couldn't keep that little gem all to myself now could I?.......Mandy

Dear Mandy
At last I was able to devote a meaningful number of hours learning how to handle the Kit. Then despite my back-up, I mysteriously lost everything with a "Clearing Invalid Data" message. After repeating the experience I contacted you, (I hope you have finished with the bucket and sponge now), and assured that all would be well if I wrote to Domark and got the latest version. No, I'm not saying it hasn't solved the problem, I don't know yet, it will take quite a few hours before I am sure but I found some problems which I thought might interest fellow members. Firstly, Domark's address - Domark Software Ltd, Ferry House, 51-57 Lacy Road, Putney, London, SW15 1PR. They have a customer enquiry number 081 780 2224 which referred me back to you Mandy. I phoned them because the installation program of V2.07 (PC version) would not complete, reporting that the serial number of the second diskette was incorrect. Eventually I XCOPYed the diskettes (via Hard Disk), onto a HD diskette. (I copied disk two onto both its root and sub-directory, I'm not certain which one it found). That problem solved I went on to discover I had expensive printer problems. Next day when I turned on the PC I almost threw in the towel as everything went wrong. No Menu, no Path set, no colour, no full prompt. Eventually I realised that the 3D installation program had saved my Autoexec and Config files with a different suffix and installed new ones. Once discovered, reinstating was easy. Phew. An unexpected bonus is V2.07 includes the full complement of clip-art files. That inspired me to put my notes of their contents into a spreadsheet. I enclose a copy (in suitable format I hope), in case you think it might be useful. Finally a query, one problem I often find is an inability to enter (even in edit mode), a section of an area, possibly something to do with grouped objects, even though I

delete the group the problem continues. A good example is clipart 0076 where although I can enter the fun palace I am not sure how I do it. Help please. So all in all I still haven't lost my novice status.

John Hayward - PC KIT 2

Sorry I had to put you on to Domark for the disks, John, it was because my supply was washed away in the floods. Yes I have now finished with the mop and bucket thank goodness! I forgot that both Domark and Incentive tend to refer everyone back to me. The problem with the report of a wrong numbered diskette was reported to me a while ago and was corrected so I think they sent you an earlier V2.07 by mistake. The installation problem has also been sorted out. I'm sorry you have had so much trouble. The problem with the invisible objects preventing entry into areas (or though doorways!), has been reported to the programmers - I've even sent quite a few datafiles from members to them so they can see exactly what was happening. I am keeping my fingers crossed (and everything else that will cross), that V2.09 or V2.10 will be bug-free and will be the final version of Kit 2 to be released. I'll report on this in the October issue and then arrange for all disks to be swapped, all being well...........Mandy

Dear Mandy
I thought I would let you know that I have discovered why there is no "look down" option in the controls menu of Kit 2. When I looked through all the options I noticed that there were two "rotate right" controls. The second one is in fact the "look down" control. I have managed to get the move forward and up controls to work in my game although it was very fiddly. At least it works now, so there is no worry about a bug any more. I have also found a mistake in the manual (Kit2) which you may want to report in the newsletter. Page 83 describes the ACTIVERANGE(P1) command, but when I tried it in a routine the command was not accepted. I found that the accepted command is ACTIVERANGE(P1). I'm afraid my 8-bit articles may be coming to an end soon, as I don't spend much time with my C64 any more. I will probably be writing one more article for the next newsletter. I hope the 8 bit sections keep alive as, previously being an 8 bit owner I know how distressing it is to see all the newer computers take over the world. The other day I was using Kit 1 and altered the preferences so that I had 1.5 MEG of working memory - compare that to the 5K I had on the C64! The Amiga has 300 times the amount of memory to work with. This may give you the impression that I am abandoning the C64, but that couldn't be further from the truth. I still love that machine but I am simply not going to use it as much as I used to. As your 8-bit computers drowned in the floods I would be only too happy to assist you in any way possible.

Stephen Flanagan - AMIGA AND C64 KIT 1 AND KIT 2

Thank you for your offer of help, Stephen, and thank you also for all the great 8 bit articles you have sent in the past. I understand that it would be impossible for them to continue indefinitely - especially when you have your new computer to get to grips with. Let's hope that you will soon be sending in some 16 bit articles instead - we cannot let your talent go to waste!......................................Mandy

Dear Mandy
I have recently been using my 3D Kit and trying to create a car game. I had problems with the wheels but I think I have found the problem now. The problem was fixing the triangles together. When you

highlight a triangle you see a box highlighted not a triangle. Can you get rid of this or reduce the size of it? It seems to act as some sort of force-field to stop other things colliding with it. If it is possible to do what I ask please send me step by step instructions of how to do it.

Christopher Horler - Nottingham

What you describe, Christopher, seems to be the "bounding cube" which is present around all Freescape objects. It cannot be removed and is one of the reasons that we have great difficulty in creating dormer type roofs or combined harvesters within our programs. I'm afraid that you have to learn to live with this small limitation and try to work around it...Mandy

Dear Mandy
I am interested in what can be done with 3D Kit to make a flight simulator. The question I have is whether the border can be modified to extend into the viewing screen. Something tells me that it can't. This makes drawing canopy bracing and gunsight/HUD into the border to overlay the viewing screen impossible. I hope I am wrong. Another question. Can the objects created by the 3D Edit program be exported to other drawing applications, edited, rendered and imported back into the Kit? What about in Superscape? What are the prospects of adding texturing and bump mapping to the Kit as modules? I plan to play with the animation. I want to animate a robot figure. From the manual it looks like I'll have to animate each of the arms and legs separately. Should be interesting. I'll let you know how I do. So far I think you have a great product.

Mike Anders - U.S.A.

Wow Mike, you are asking an awful lot of 3D Kit! What you really need is a 3D Kit Flight Simulator Creator - good news is that Domark are producing just that at the moment! Watch this space for news....Mandy

Dear Mandy
I am writing a game at the moment but I am having problems with memory. I'm finding that in some areas once I get past a certain number of objects the objects created first start becoming invisible of their own accord. Is there anything I can do about this? Apart from creating less complicated areas that is! I hope you, or a member of the club can help me out. Keep up the good work.

Alan Brown - AMSTRAD CPC

There are various ways around this problem which relate to ALL versions and ALL computers. If you don't want to delete objects or re-design your areas then firstly make sure that you colour each and every object edge that isn't immediately visible as INVISIBLE, i.e. backs and bases of doors, all but the top part of floor cubes. This will save a considerable amount of object memory. Another way is to be frugal with objects so don't use loads of small cubes to create window ledges or frames, just stick to rectangles for window panes - that kind of thing. Another fantastic way of saving objects is to make all objects in the first half of the area you are exploring visible and the far away objects invisible. Then use some kind of trigger such as an invisible floor plate to create a condition to make all the invisible objects visible as you approach them and the ones you leave behind invisible. This worked a treat when I created a

building in one area that had an upper floor, (both floors full of objects), I just used one step of the stairs as a trigger to make all the objects below invisible and all the upstairs objects visible and reversed the procedure when coming back down again. Just for reference, the amount of objects allowed per area in Kit 1 is 60 - before things start going drastically wrong with your datafile - and in Kit 2 the limit seems to be somewhere around 130, (not confirmed exactly yet but I've had that many so far). If any other members can come up with other helpful suggestions for saving memory with objects then do please send them in as it would be one of the most useful sections we could have to help everyone as I know that all of us has come across this problem at some time or other...................Mandy

Dear Mandy
The other day I was looking for Llandudno on the map and I found it to be in the upper northwest part of Wales. You, living so close to the sea have probably watched a sunrise from the beach sometimes. Therefore I enclose a disk containing a datafile made with Kit 2 VGA of a little animation of a sunrise which you can watch from the beach. I hope you like it. I hope to send it to Mark Rose for the PC PD library and I hope that other Kit 2 users will send in something soon as I understand from Mark that I am the only one to have sent in games written with Kit 2 so far.

Mieke Van Der Poll - AMIGA and PC KIT 1 and KIT 2

Yes, I do live near the sea. Actually on a peninsula so that we have not one but two beautiful beaches to choose from - I am lucky because our house is situated exactly in the middle between both of them. The sunrise datafile was lovely, Mieke. The waves lapping on the shore and the beautiful changing colours of the sunrise were astounding. You really have got to grips with Kit 2 and all the possibilities that it holds. Thanks also for the telephone call. You wouldn't have thought you were calling from Holland - you sounded as if you were calling from next door. It was lovely chatting to you and hearing your voice at last. It was also really nice of you to call to see how I was getting on during the flood, I appreciated it very much. I too hope that members will soon be sending in PD for all machines written with Kit 2. I have received one so far for the Atari ST from Tony Hartley called FAST CITY but we could do with loads more..........Mandy

Dear Mandy
I am writing to you regarding an idea that I have for the User Group. As well as being a member of your User Group I am also a member of the C Users Group (UK). Every year that User Group sends a booklet to all of its members giving the addresses of everyone in the User Group. The members are informed about the booklet and if they do not want to be listed in the booklet they can inform the membership secretary. I think it would be a good idea to have a similar booklet for your User Group as it would allow other members to communicate with each other. I would like to hear what other members think of this idea.

John Clarke - PC - Penge, London

I don't know what others might think about the idea, John, I do know that quite a few members have written to me recently asking if I would be prepared to run a pan-pal page or something similar. I am happy to oblige providing there is sufficient interest in the idea. If you want a pen-pal page then send in your name and address etc to be included and I will do the rest.................................Mandy

Dear Mandy

You may remember a while ago I asked if anyone had found a way of successfully transferring the IBM PC format LBM graphic files from an art package to the Kit, while retaining the correct palette? What happened to prompt me to ask was, after spending hours designing a nice border I duly saved it and then reloaded it into the Kit, but all the colours appeared differently to those in the original. I put this down to the free-reign we have in the Kit to alter the palettes to suit our needs - the art package doesn't know this of course and provides its own. The way I've found around the problem is to use a screen-grabbing program. I'm sure there are versions for most of the 16 bit computers and there's usually one with the art package. You load the grabber into memory then start the Kit. Alter the palette as needed in the Kit and set your view-window size. Pull up the COLOUR option, select an item and get the palette displayed on the screen. Then "grab" it using the utility. When it is done load the screen into your art package and hey-presto, its palette should be the same as the Kits. You then carefully erase everything on the display, (don't New it), except as much of the outline of the view-window as you can, and begin your masterpiece! The only problem I have come across with this method is that you can alter the colours used by the art package to display its menus, and if that is then dark on dark you can't see them! If there is a much easier way can someone please let me know? I look forward to seeing what version V2.09 is like.

Nigel Alefounder - PC KIT 1 AND KIT 2

Thank you very much for the useful tip, Nigel. I understand from Mieke that, although the colours of your original borders do change when loaded into the Kit they do revert back to their original colours when included in a stand-alone game. But to see how effective your borders are and for ease of programming your method should be a boon to overcoming all those difficulties that everyone has experienced. It seems silly to have to work with a border that is totally the wrong colour whilst programming anyway. I'll have a word with the Programmers about this and see if it can be corrected so we don't have to go to all that trouble to overcome a fault...................Mandy
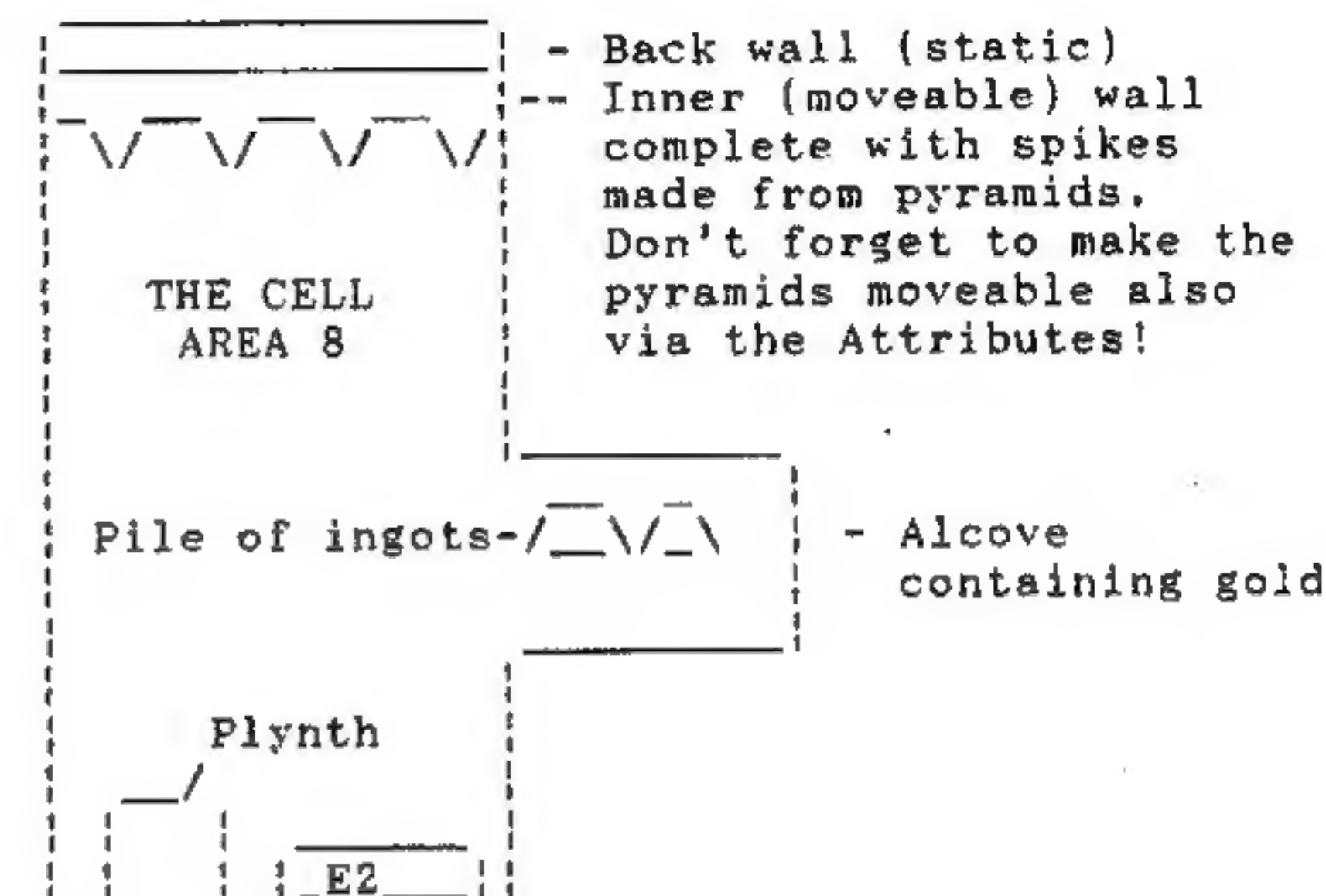
Dear Mandy

I just had to write and tell you how impressed I am with the 3D Construction Kit. Just to have the ability to draw a picture on the television screen and then be able to walk into and around it and view it from all sides is extremely exciting in itself! I have copied my own home into a 3D environment, which is probably a bit tame, and am thoroughly enjoying getting all the rooms connected in the right way and duplicating all the furnishings to the best of my ability. I haven't had so much fun in years! I expect that, with the help of the newsletters, I will soon be able to move on to bigger and better things and, considering that I have done nothing else on the computer since I bought 3D Kit, I reckon I am hooked. I am glad to see that you haven't forgotten the beginners in the newsletters as the step by step routines are proving invaluable to me in understanding how everything works. Some of the routines, especially the ones where you have to sort out the variables and put in your own are a bit beyond my understanding and capabilities just now but I am sure that with time I will begin to understand them a little better. It is strange that a middle-aged woman should be feeling just like a kid again but I cannot help feeling that I am building with lego bricks again with 3D Kit!

Paula Hanson - ATARI ST KIT 1

THE USER GROUP GAME

PART SIX:

To continue with our puzzle between the Dungeon and the Cell from last issue we should firstly create another area. AREA 8 and once this is done, call it THE CELL using the EDIT AREA option. What we want to create is an area that looks something like this:.

- Back wall (static)
-- Inner (moveable) wall complete with spikes made from pyramids. Don't forget to make the pyramids moveable also via the Attributes!

THE CELL AREA 8

Pile of ingots-/__\/_\

- Alcove containing gold

Plynth

E2

In the Dungeon we already programmed the animation to start upon entering the cell so we will program the animation first. Create an Animation and Edit the animation as follows:

```
INCLUDE (5)     - Inner back wall and all the
INCLUDE (22)      pyramids (spiked). You could
INCLUDE (23)      also include them all within
INCLUDE (24)      a group and animate that but
INCLUDE (25)      this is to show object nos.
START
LOOP (10)
MOVE (40,0,0)
AGAIN
RESTART
```

Now there is only one way to stop the animation and that is if the player has taken the crystal from the Dungeon and places it on the plynth by activating the plynth. So enter the following condition for the plynth which in my case was Cube 8: The other crystal which we want to appear on the plynth as if it was the same one is Pyramid 10:

```
IF ACTIVATED?         - If plynth is activated
AND VIS? (15,6)         but crystal is still
THEN SOUND (4)          in Dungeon then "ping"
ELSE IF INVIS? (15,6)   but if it was taken
THEN VIS (10)           then make a crystal
STOPANIM (1)            appear and stop the
SOUND (4)               animation with "ping"
ENDIF                   sound effect.
ENDIF
```

You should also create your Entrance in the usual way and enter a

condition to take you back to the Dungeon so you can go back and check everything. The player can't if they haven't stopped the animation though as they will have to start again as once they touch the wall and spikes then it is game-over for them.

Now for the condition for the moving wall and spikes. This should be entered for ALL the object which were included in the animation or it will not work:

```
IF COLLIDED?
THEN GOTO (3,10)
ENDIF
```

You may wonder why we have entered another GOTO in this conditiion. Well we could have just put ENDGAME instead of the second line of the last condition but that doesn't look very professional now does it? So we are going to create another area - Area 9 and edit the name of the area to DEATH. What I have done in my "DEATH" area is to create a rather gloomy landscape with a grave complete with headstone upon which is written R.I.P. - this was done with edited cubes for ease. You can of course choose anything appropriate as you wish such as a skull or whatever. The idea is to let the player know, in a rather dramatic way, that he has died, give him chance to gaze upon the tombstone for a while and then to reset the game to the start.

To do this we should enter an AREA CONDITION - something we haven't done so far. Firstly, via the top Area menu bar we should CREATE CONDITION then via the same menu bar we should EDIT CONDITION and enter the following:

```
DELAY (500) - Give player time to view the
ENDGAME       scene and then reset to start
ENDIF         of the game.
```

Now that we have our death area ready, all we need to do is to go back through our conditions in the various areas where death is a possibility and change all the ENDGAME conditions to read GOTO (3,10). I used entrance 3 because after designing my grave, entrance 3 gave me the best possible viewing angle for the player.

Our User Group game is nearly complete but needs tidying up quite a bit so that we have introductory messages, congratulations messages and so forth appearing when appropriate. We may add one or two other puzzles but basically the framework is complete. Next issue we will sort out some messages and add the conditions needed for when the player finally gets the gold ingots. Of course, if anyone would like to add anything to the game then do write in and let me know. Up until now we haven't used the dreaded VARIABLES, simply because they can be off-putting for beginners. It might be a good idea to include some next time too to gently lead everyone into getting to know how useful they are.

For any new readers who would like to join in programming the User Group Game all the routines from the start are available at no extra charge so that nobody need feel left out of things. Check out the bottom of the "Contents" page for details of how to get the rest of the routines and, incidentally, some other useful bits and pieces that they might find useful.

TO BE CONTINUED...

BEGINNER'S SECTION

THE DELAY COMMAND AND HOW TO USE IT

By *Mieke Van Der Poll* - AMIGA & PC - KIT 1 & KIT 2

The DELAY command can indeed be used in various ways. It can be used instead of a variable as a text timer, you can also use the delay command as such, for instance when you pick up an object:

```
IF ACTIVATED?
THEN PRINT ("You pick up an object",1)
DELAY (150)
PRINT ("                      ",1)
ENDIF
```

On faster computers it sometimes seems as if you (or the player), are constantly running through your environment, particularly in areas where the number of objects is small (tunnels in a maze). You can prevent this by using a combination of a sound effect and the delay command. Make a trigger command for the floor (Cuboid 1) as follows:

```
IF COLLIDED?
THEN SOUND (1) - walking sound
DELAY (5)
ENDIF
```

If you want a player to stumble because he is severely injured or lost a lot of energy you can create an appropriate sound and use the same routine as above for the floor, increasing the number of the delay command.

With the sound editor you can make sound effects and, of course, the delay command is very handy to obtain all sorts of sound effects, but it is also possible to create music notes and make little tunes using the delay command, which can be used during a game or as accompanying music in another environment. The command: LOOP (nr) .... AGAIN is also very useful when you want to repeat some notes.

```
LOOP (2)
SOUND (1)
DELAY (5)
SOUND (2)
DELAY (8)
SOUND (3)
DELAY (10)
AGAIN
```

The above routine means that those three sounds or notes are repeated one more time. In the PC PD library there are some example music files (3wd-files) for Beeper and Soundblaster available on disk.

You can also use the delay command during animation of certain objects. If you have for instance an animation of the word END in

your endgame area, you can move the object in different directions delaying it when moving it into another direction and by using sound effects you can create a kind of "dancing" or "bouncing" effect. You can also obtain a good effect with an aeroplane crashing animation and letting it bounce on the ground.

You can also use the delay command when showing pictures during a game and it is also possible to use the delay command together with the FADEIN and FADEOUT commands.

There are probably loads more possibilities for using delay but even just from the above it is clear that this command can be used in a very creative way indeed.

MAKING GAME BATCHFILES WITH CHOICES

(SUPPLEMENT TO ARTICLE IN NEWSLETTER 9 - PAGE 15)

By *Mieke Van Der Poll* - for PC users

On the PC it is possible to quit a stand alone 3DKit game by pressing SHIFT+ESC. In this way it is also possible to go on with PART II of a game. In the first part of the game you can put a message at the end in a text instrument. You can for instance have an entrance in the last area with the conditioin:

```
IF COLLIDED?
THEN PRINT ("press SHIFT+ESC to play part II",1)
ENDIF
```

In your Menu textfile you can include a line to let the player choose part II by pressing a key.

I will give an example of how to put choices in a batchfile and how to make the batchfiles connected to these choices. First make a textfile in a text editor (you can use any text editor that saves your text as an ASCII file - i.e. text-readable file:

```
*****************************************

                 Welcome to

             the name of your game

                  created by

                  your name

            Using the 3D Construction Kit 1 or 2
                  Domark/Incentive

      Type in the number of your choice:  (+ Enter)

      1. See Introductory/Instruction Screens first.
      2. Go directly into the Game Part I.
      3. Go directly into the Game Part II
      *****************************************
```

You can add more choices if you want to. Save this text for instance as Menu.txt.

Then create your first batchfile with the editor:

```
@echo off
cls
type menu.txt
```

Save this batchfile for instance as start.bat.

Create your second batchfile:

3DKit 1	3DKit 2
@echo off	@echo off
cls	cls
showit picture1.gif	showit picture1.gif
cls	cls
showit picture2.gif	showit picture2.gif
cls	cls
showit picture3.gif	showit picture3.gif
cls	cls
runvga gamename.run (of part I)	gamename (of part I)
(runega or runcga)	

Save this batchfile as 1.bat. Don't forget to place a message on the picture screens to press ESC to go to the next picture and finally to the game!

Create your third batchfile:

3DKit 1	3DKit 2
@echo off	@echo off
cls	cls
runvga gamename.run (part I)	gamename (part I)
cls	cls
type menu.txt	type menu.txt

Save this batchfile as 2.bat.

Note that in order to play part II of the game directly after part I, I have placed the menu.txt again in the above batchfile. So if the player presses SHIFT+ESC in part I of the game he will be back with the Menu.txt on the screen at the DOS command line.

Create your fourth batchfile:

3DKit 1	3DKit 2
@echo off	@echo off

```
cls                                      cls
runvga gamename.run (part II)            gamename (part II)
```

Save this batchfile as 3.bat.

You have four batchfiles now and one menu.txt.

3DKit 1: Copy them together with picturefiles, pictureviewer, runvga
and gamename.run to a floppydisk and, if you have a part II
        game. copy that one too.

3DKit 2: Copy them together with picturefiles, pictureviewer and your
        gamename.exe file to a floppydisk. Create the _game sub-
        directory and copy the relevant files into gamename.exe file
        too and create the relevant _game subdirectory and copy the
        files belonging to that one into it.

In 3D Kit 2 it is also possible to load your introductory screens
directly into your datafiles with the LOADSCREEN command. Then you
can give the player two choices:

                    1. Go directly into game I
                    2. Go directly into game II

If you don't have a second part to your game then no batchfile is
necessary. If you do then place your introscreens into your datafile,
they have to be copied into the _game subdirectory where the other
relevant files are stored.

HALL OF FAME

It is a double hall of fame this month really as two issues are being
posted out together. Sincere thanks to the following members who took
the time and trouble to send in contributions and cover designs, hints
and tips, articles etc, to help their fellow members out:

GEERT REYSERHOVE, MIEKE VAN DER POLL, NIGEL ALEFOUNDER, MARTIN PANTON,
TONY HARTLEY, ROBIN BALL, STEVEN FLANAGAN, R. CONNEL, BERND TAENZER,
JOHN HAYWARD, JOHN CLARKE, FREDDY MOEREMAN, PATRICK PEARSON, ANDY
COLLINS, JASON DEANE, PHILIP BRADSHAW, VANDA COSTELLA, KATHERINE
SHEPHERD, SUSAN WHISTON and DAVID SMITH.

All members are coordially invited to send in contributions for the
next newsletter. Even if it is just a small hint or tip right up to
full-blown articles - everything will be gratefully received,
especially as with putting out two issues together I am a bit short of
contributions for the October/November issue which is due out in the
middle of October. With this issue we are now, hopefully back to
normal after the devestation and disruption caused by the floods but
it has meant that I have used almost all the contributions I had on
file. I would be grateful to you all if you could help me fill up the
files again so that future issues are well-padded.

****

8 BIT ROUTINES

A RANDOM CAVE-IN
By *Daniel Prentis* - SPECTRUM

The object of this little sub-game is to get to the other side of the
cave, get the key (by activating it), and leave through the door
before the ceiling "caves-in". The ceiling lowers and raises again at
random intervals so you'll need to be lucky as well as skillful to get
through. YOu'll need two rooms for this - the room with the cave-in
and the one you need to escape into. The first one should be
constructed like this:

TOP VIEW	TOP VIEW	FRONT VIEW	TOP VIEW
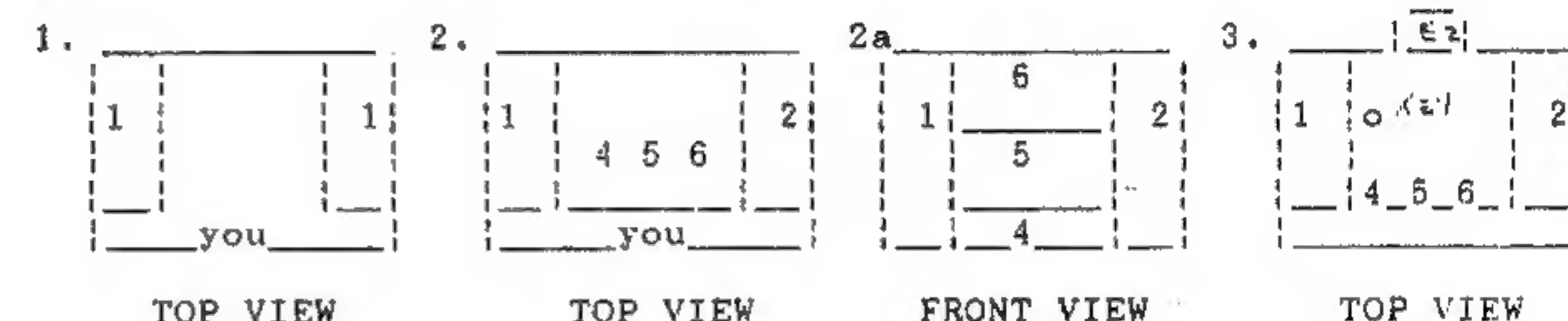
Make two large   Make cuboids 4, 5 and 6 and   Make a shape for
cuboids and move   sandwich them on top of each   the key and a
them to opposite   other between cuboids 2 & 3   door in the far
sides of the room.   as shown in 2a.   wall.

Now type this condition into LOCAL 1:

```
CMPV    111    122  ─┐
IFEQ                 │
AND                  │   \ triggers cave-in
CMPV    0      0     │   / on the random
IFEQ                 │   : condition.
THEN                 │
SETV    1      0   ─┘
ENDIF
CMPV    255    122  ─┐
IFEQ                 │
AND                  │   \ does the same as the
CMPV    0      0     │   / first - the more of
IFEQ                 │   : these you add the
THEN                 │     more frequent the
SETV    1      0   ─┘     cave-in
ENDIF
```

LOCAL 2 needs to be typed in three times, each time substituting a
value for a, b, c and d from the table:

```
CMPV    a      0  ─┐
IFEQ               │  \ X3
THEN               │  /
VIS     b          │
ENDIF            ─┘
CMPV    c      0  ─┐
IFEQ               │  \ X3
THEN               │  /
INVIS   d        ─┘
ENDIF
```

	1	5	10
a	1	5	10
b	6	5	4
c	15	20	25
d	4	5	6

- the first part lowers the ceiling
  the second part raises it.

Now type this into LOCAL 3:

```
CMPV     26    0 |    This part resets the movement
IFEQ              \ - variable after ceiling has
THEN              /   risen.
SETV     0     0 |
ENDIF            =
CMPV     0     0 |    This checks if the ceiling
IFGT              \ - has been activated and if so
THEN              /   adds 1 to the movement
ADDV     1     0 |    variable.
ENDIF            =
CMPV     255   121 |
IFEQ               \ - Forces a redraw.
THEN               /
REDRAW           _|
ENDIF
```

You can easily add routines for the door and the key. I suggest something like this:

```
IFACTIVE  7
THEN
INVIS     7
SETV      1    1
ENDIF
CMPV      1    1
IFEQ
AND
IFHIT     8
THEN
GOTO      1    2
ENDIF
```

You will also need an endgame routine so use IFCRUSH. If you find the game play a little too easy then I suggest you reduce the walking pace or reduce the area scale. You could also make the cave-in a bit more frequent. Good luck!

COMPILING TIP
By *Stephen Flanagan* - COMMODORE 64

When using the compiler, if you make a mistake you can start again without reloading the compiler by either freezing or resetting the machine and typing G 2000 or SYS 8192 respectively.

SIMULATING A LARGE OUTSIDE AREA
By *Yannick Gour* - AMSTRAD CPC

It is impossible with using the WALK mode because the smallest scale (1) is not sufficient. The only way is using the FLY mode (especially Fly 1 to simulate Walk mode) with scale 1 and very little height (about 2 units above ground). By the way it's better to use a rectangle than a cube for the ground as it has null height and you can go as low as you want. It does really give a good impression. The area seems to be about 200 meters wide. Designing an horizon on the "walls" increases the overall effect of a really huge area.

****

16 BIT ROUTINES

PROGRAMMING A HIGH SCORE TABLE

By *Martin Panton* - 3D KIT 2 - PC

Here is a routine to create a High Score Table. It is only a rather basic routine and my documentation of it leaves a lot to be desired. It might not be much good for the beginner as yet but those of you who now know their way about Kit 2 should have no problems understanding it I hope.

Right, the first thing we have to do is to load up 3D Kit 2, CREATE and INITIAL CONDITION and EDIT the CONDITION. Type in the following:

```
SETSTR ("NAME ONE",S2)
SETSTR ("NAME TWO",S3)
SETSTR ("NAME THREE",S4)
SETSTR ("NAME FOUR",S5)
SETSTR ("NAME FIVE",S6)
SETVAR (5000,V32)
SETVAR (4000,V33)
SETVAR (3000,V34)
SETVAR (2000,V35)
SETVAR (1000,V36)
SETVAR (10,V37)
FOPEN ("SCORES.3DK",1)
FPUTS (S2)
FPUTS (S3)
FPUTS (S4)
FPUTS (S5)
FPUTS (S6)
FPUT (V32)
FPUT (V33)
FPUT (V34)
FPUT (V35)
FPUT (V36)
FCLOSE
FOPEN ("SCORES.TMP",1)
FPUT (V37)
FCLOSE
```

Now while still in the editor save it as scores.txt as you may need it again. Now exit the editor, click on TEST and press ESC then F1. Now exit 3D Kit 2. You should now have two files on your disk called SCORES.3DK and SCORES.TMP.

(1). The next thing we have to do is to create a border like the one shown in (FIG 1).

(2). Load up 3D Kit 2, colour cube 1, the sky and horizon the same colour as the background of your border.

(3). Set the view window as small as possible in one corner of the screen.

(4). Load in your border and set it in the DEFAULTS as BORDER 1.

(5). Create 12 INSTRUMENTS as follows:

```
 1 TEXT
 2 TEXT
 3 TEXT
 4 NUMERIC      VARIABLE V32    SET VALUE 2  100000
 5 NUMERIC      VARIABLE V33    SET VALUE 2  100000
 6 TEXT
 7 TEXT
 8 NUMERIC      VARIABLE V34    SET VALUE 2  100000
 9 TEXT
10 NUMERIC      VARIABLE V35    SET VALUE 2  100000
11 TEXT
12 NUMERIC      VARIABLE V36    SET VALUE 2  100000
```

(6). Set them as shown in FIG 1.

(7). Create 45 procedures and edit them according to the Procedure List shown below:

PROCEDURE 1

```
LOADWORLD ("GAME.3WD")
```

PROCEDURE 2 TO 42

```
IF VAREQ? (1,V30)
THEN
ADDSTR ("1",S1)
DELAY (5)
PRINT (S1,2)
```

Note: Where "1" is replace with the corresponding key. I.e. 1-0, A-Z or a space for the space bar.

PROCEDURE 43

```
PRINT ("              ",2)
CLEARSTR (S1,S1)
```

Note: Set the print command to the size of Instrument 2.

PROCEDURE 44

```
IF VAREQ? (1,V30)
THEN
IF VAREQ? (1,V31)
THEN
SETSTR (S1,S6)
PRINT ("              ",11)
PRINT (S6,11)
SETVAR (V37,V36)
UPDATEI (12)
PROC (45)
ELSE
IF VAREQ? (2,V31)
THEN
SETSTR (S1,S5)
PRINT ("              ",9)
PRINT (S5,9)
SETVAR (V37,V35)
UPDATEI (10)
PROC (45)
ELSE
IF VAREQ? (3,V31)
THEN
SETSTR (S1,S4)
PRINT ("              ",7)
PRINT (S4,7)
SETVAR (V37,V34)
UPDATEI (8)
PROC (45)
ELSE
IF VAREQ? (4,V31)
THEN
SETSTR (S1,S3)
PRINT ("              ",6)
PRINT (S3,6)
SETVAR (V37,V33)
UPDATEI (5)
PROC (45)
ELSE
IF VAREQ? (5,V31)
THEN
SETSTR (S1,S2)
PRINT ("              ",3)
PRINT (S1,3)
SETVAR (V37,V32)
UPDATEI (4)
PROC (45)
ENDIF
END
```

```
FOPEN ("SCORES.3DK",1)
FPUTS (S2)
FPUTS (S3)
FPUTS (S4)
FPUTS (S5)
FPUTS (S6)
FPUT (V32)
FPUT (V33)
FPUT (V34)
FPUT (V35)
FPUT (V36)
FCLOSE
```

(8). Now click on controls, then on ADD, then press on FUNCTION with the LEFT MOUSE BUTTON until you reach RUN PROCEDURE. Type in number 1 then click on SET. Drag the box over the PLAY BUTTON, when this is set over the button press the LEFT MOUSE BUTTON then click on OK. Note: Do not test the play button yet!

Next do this for all the buttons on the keyboard so that the buttons 1 to 0 run the procedures 2 to 11 and the buttons Q to] run procedures 12 to 41. (Note that the keys mentioned here might have to be altered to suit your particular keyboard layout - Mandy). The SPACEBAR runs procedure 42 and the CANCEL button runs 43 and the ENTER button runs procedure 44.

Also, if you set the KEY section of the controls to the corresponding letter or number - i.e. Key Unshifted Q then if you pressed Q on the keyboard it would be the same as clicking on the Q button with the mouse.

(9). Create INITIAL CONDITION 1 and type in condition 1 from the Procedure List then save as GO.3WD and click on Clear All.

INITIAL CONDITION

```
FOPEN ("SCORES.3DK",0)
FGETS (S2)
FGETS (S3)
FGETS (S4)
FGETS (S5)
FGETS (S6)
FGET (V32)
FGET (V33)
FGET (V34)
FGET (V35)
FGET (V36)
FCLOSE
PRINT (S2,3)
PRINT (S3,6)
PRINT (S4,7)
PRINT (S5,9)
PRINT (S6,11)
UPDATEI (4)
UPDATEI (5)
UPDATEI (8)
UPDATEI (10)
UPDATEI (12)
```

(CONTINUED OVERLEAF.....)

```
FOPEN ("SCORES.TMP",0)
FGET (V37)
FCLOSE
IF VARGT? (V37,V36)
AND VARLT? (V37,V35)
THEN SETVAR (1,V30)
SETVAR (1,V31)
PRINT (" N A M E",1)
ELSE
IF VARGT? (V37,V35)
AND VARLT? (V37,V34)
THEN SETVAR (1,V30)
SETVAR (2,V31)
PRINT (" N A M E",1)
ELSE
IF VARGT? (V37,V34)
AND VARLT? (V37,V33)
THEN SETVAR (1,V30)
SETVAR (3,V31)
PRINT (" N A M E",1)
ELSE
IF VARGT? (V37,V33)
AND VARLT? (V37,V32)
THEN SETVAR (1,V30)
SETVAR (4,V31)
PRINT (" N A M E",1)
ELSE
IF VARGT? (V37,V32)
THEN SETVAR (1,V30)
SETVAR (5,V31)
PRINT (" N A M E",1)
```

(10). Create two cubes and set the conditions for the cubes as follows:

CUBE 1

```
IF SHOT?
THEN ADDVAR (100,V37)
UPDATEI (1)
ENDIF
```

CUBE 2

```
IF COLLIDED?
FOPEN ("SCORES.TMP",1)
FPUT (V37)
FCLOSE
LOADWORLD ("RUNNER.3WD")
ENDIF
```

(11). Set up a border for the game and a numeric instrument (1) and set its variable as V37 then save as GAME.3WD.

(12). Using the MAKE program make GAME.3WD into a stand alone game and do the same for GO.3WD. Now go into the -game directory and rename RUNNER.3WD GAME.3WD. Then copy GAME.3WD and the border file into the _go directory. Note: Also copy the files SCORES.3DK AND SCORES.TMP into the _go directory.

(13). Run Go press play, when the game loads, shoot cube 1 so that your score = 1500 then go collide with cube 2. You should now be back at the score table with the word NAME visible in Instrument (1), if

TEXTURE MAPPING — WELL, ALMOST!
By *Tony Hartley* - ATARI ST - KIT 2

so, enter your name and click on Enter and your name should replace the button name on the score table.

I have found a way to create Texture Mapping. Well, not quite but it is the next best thing to it. The idea came to me at 2 in the morning so I had to rush to the computer to try it out and it works beautifully. You too can have brickwork on your walls/house etc, or even letters on buttons such as a letter "U" on the UP button on a lift. It all comes down to the good old User Fades. There are drawbacks as if you look at the wall from an angle instead of head-on it can look a little weird and the closer you get to a wall the more bricks appear so it is a case of only using the idea in certain places where it will not look silly. I am enclosing a picture as an example. Only thing is, after shrinking it down and converting it to black and white it does lose some of its initial impact. Not to worry though, this is how it is done:

Make a wall from a cube and make a copy of the wall in front of it. FIG B & C. Colour the back wall white and the front wall red. Shrink the front wall up to the back one tightly. Go to the User Fades and make the fade pattern the same as in the picture FIG A. Set the ATTRIBUTES of the front red wall to FADE OFF and FADEVAL 11 or whatever the number user fade you just made. Create a Local Condition then edit it like this:

```
          SETFADE (11,3,1)
          ENDIF
```
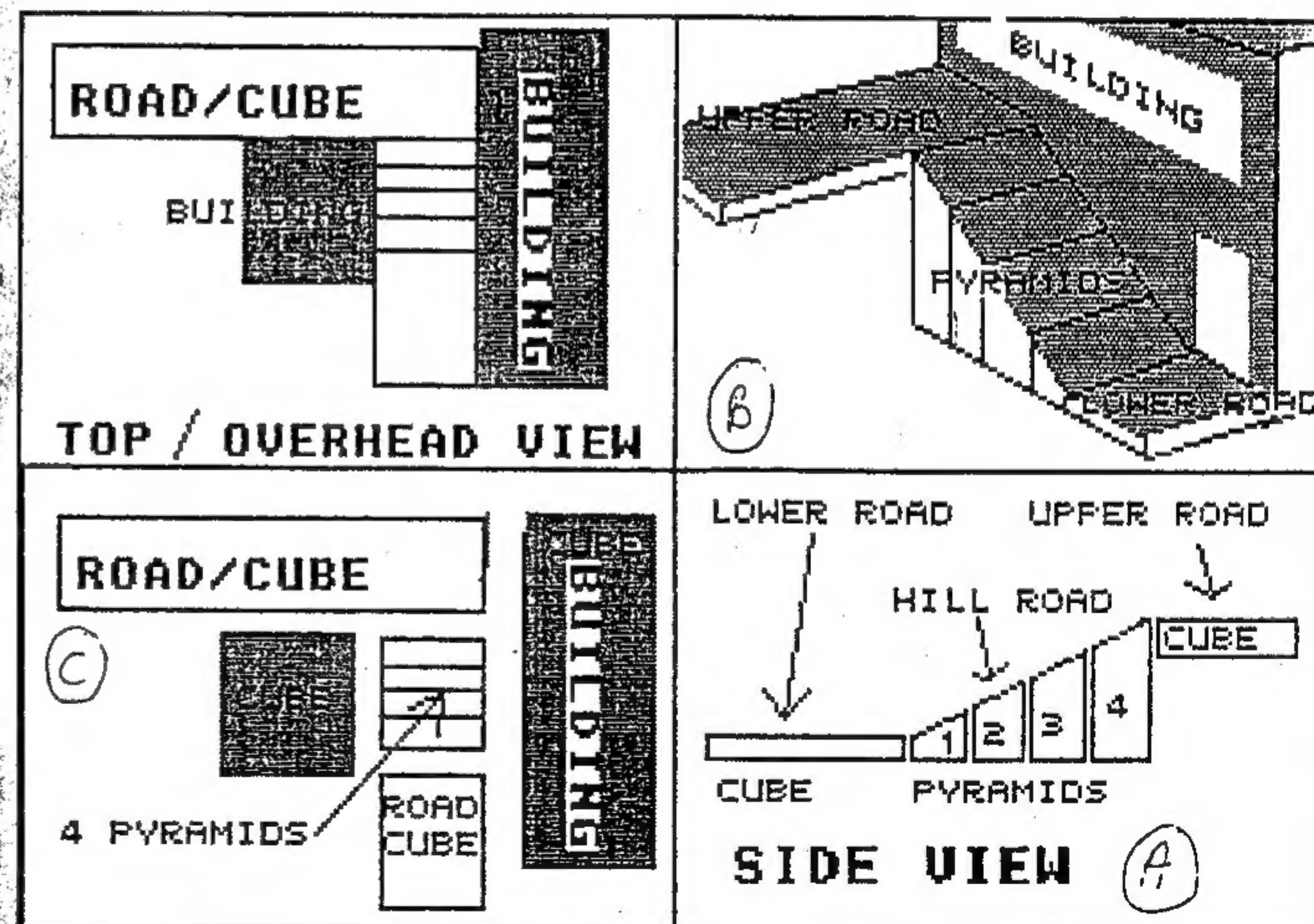
11 Being the Fade Number, 3 being the red wall object number and 1 being the area number that your wall is in. Hey presto! a brick wall and it works on anything. You could also try a user fade with a letter on to use on a lift. Just follow the same steps as above but make a little cube for a button and copy it in front.
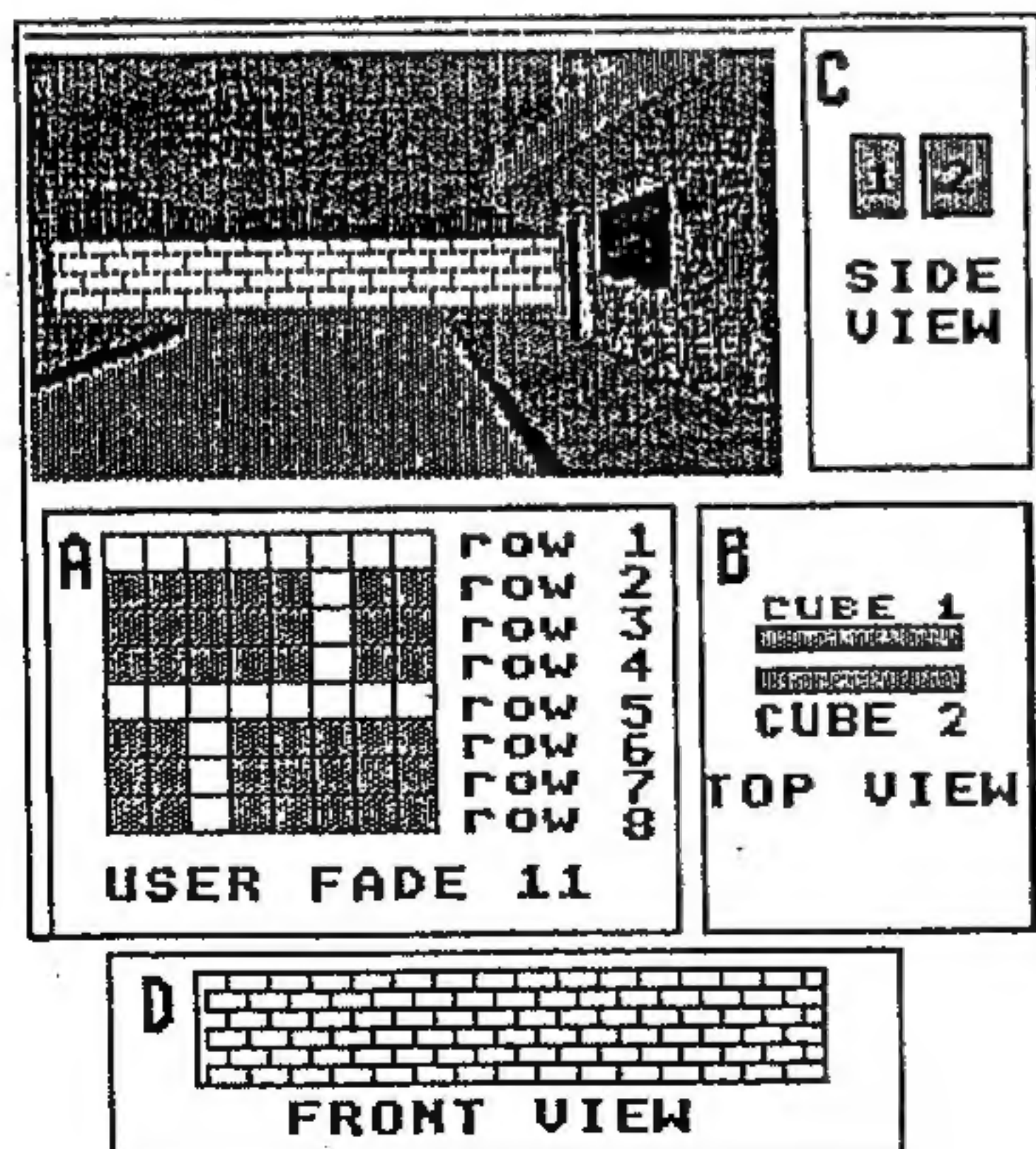
ON THE LEVEL
By *Tony Hartley* - ATARI ST KIT 1 AND KIT 2

Here is a routine for everyone to try if they want. You don't have to have all your roads etc on one level. The problem when using a pyramid as a hill slope is that the computer does not let you slide down the slope itself but carries on as if you are walking on the top. If you put a highlight around the pyramid you will see what I mean. The computer won't let you go down the slope which is inside of the highlight cube surrounding the sloping pyramid. If you are trying to go up the slope and it is higher than you it is impossible. The solution is to make lots of pyramids in front of each other as in FIG A & B below. The more pyramids you use the greater the effect and the less it seems that you are travelling up and down steps. Just make sure that you put each one tight up against the next one so that you don't fall into the gaps. As always it is easier to try than to explain.

CONSTRUCTION
KIT and
USER GROUP